

International Certificate in Financial Services Risk Management

Building excellence in risk management

Qualification Syllabus

Overview of Module 1: Principles of Risk and Risk Management in Financial Services

Module aims

This module introduces the principles and concepts of risk and risk management in a Financial Services context. The history of risk management is explored as a means of understanding the current drivers of enterprise risk management, and the development and impact of international and regulatory standards. This leads to an examination of the ways in which risks are classified in a Financial Services environment and the approaches that are utilised to identify, assess) including a range of quantification tools) and treat them. The module seeks to provide an enterprise risk management context for many of the practices within a Financial Services environment so it considers the major risk categories on both a standalone and aggregated basis.

In the second module of this course we investigate more detail around detailed aspects of the risk management framework and its implementation.

Module learning outcomes

By the end of the module you should be able to:

- Recognise the origins and key concepts relating to risk management in banks and insurers
- Understand the regulatory environment within which risk management in financial services has developed
- Understand the main sources of risk within banks and insurers, the links to their business practices and be able to classify those risks
- Compare and contrast the main risk management standards including those required by regulation.
- Apply the concepts of enterprise risk management and understand what a risk management framework is.

- Examine the main approaches to risk identification.
- Describe and compare the main approaches to the analysis and evaluation of risk within banks and insurers, across different risk categories as well as in aggregate, including use of VaR, stress tests, risk assessments and regulatory prescribed standardised models
- Distinguish the main features of risk control techniques across the major risk categories in banks and insurers.

Unit 1 Concepts and definitions of risk and risk management



Unit learning outcome

After studying this unit, you should be able to:

- Recognise the origins and key concepts relating to risk management
- Understand the key risks within banks and insurers and how they arise from the main business processes

Unit contents

Section learning outcomes

1.1 Approaches to defining risk...

Provide a range of definitions of risk and risk management

1.2 Impact of risk on organisations...

Analyse how risks impact on organisations, for example by way of the attachment of risks theory.
Understand how risks arise within the key business processes in banks and insurers

1.3 Types of risk...

Describe options for classifying risks in a financial services environment (liquidity, market, operational, credit etc.)

1.4 Development of risk management...

Outline the history of risk management in Financial Services, including the development of regulation, various specialist areas and approaches (including functional requirements, risk standards, use of models and other tools, etc.)

1.5 Principles and aims of risk management

Consider the principles and aims of risk management and risk management's importance to strategy and operation

Core reading:

- Apostolik and Donohue (2015), chapters 1, 2 and 9 and pages 69–87, 98–9, 174–5, 218–9
- Hopkin (2017), chapters 1–5
- *The Orange Book* (HM Treasury, 2004), chapter 1

Unit 2 Risk management standards



Unit learning outcome

After studying this unit, you should be able to:

- Compare and contrast the main risk management standards
- Understand the key regulations driving risk management approaches that are applicable to banks and insurers

Unit contents

Section learning outcomes

2.1 General risk management standards and risk management frameworks

Describe the key stages in the risk management process, provide an introduction to the risk management framework that shall be studied in more detail in Module 2 and the key features of the best known risk management standards and frameworks currently in use. Provide links to the regulatory drivers of risk management in the next unit.

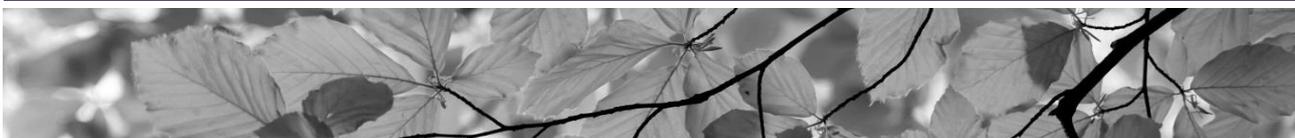
2.2 Alternative risk management approaches

Understand that there are a number of additional expectations around risk management including Basel II, Basel III, Dodd-Frank, Solvency II, IAIS, Finma, US Federal Reserve, NAIC, FASB and FRC etc.

Core reading:

- Apostolik and Donohue (2015) pages 88–92, 270–3 and 303–4
- Hopkin (2017), chapters 6 and 9
- Airmic/Alarm/IRM (2010), part 1

Unit 3 Enterprise risk management



Unit learning outcome

After studying this unit, you should be able to:

- Apply the concepts of enterprise risk management (ERM)

Unit contents

Section learning outcomes

3.1 Defining Enterprise risk management overview

Outline the key characteristics of the risk management framework as set out in financial services regulation and practice. Show similarity to COSO and also link to (rating agencies) ERM requirements.

3.2 Enterprise risk management overview

Explain the key features of an enterprise-wide approach to managing risk, acknowledging the different emphasis for different risk types within an organisation

3.3 Implementing ERM

Identify the four stages of the ERM implementation process

3.4 Establishing the context for risk management

Discuss the various approaches to establishing the internal and external context for ERM

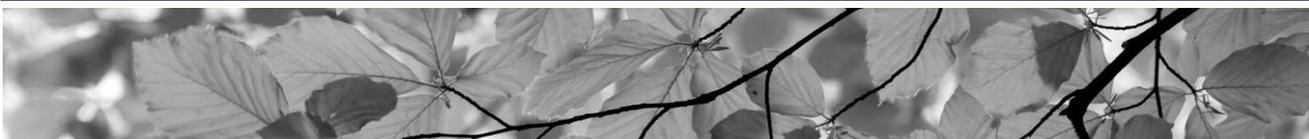
3.5 Objective setting

Discuss approaches to setting objectives

Core reading:

- Apostolik and Donohue (2015) pages 258–65 and 303–4
- Hopkin (2017), chapters 7, 8 and 21.
- *PRA Rulebook* section on risk management
- Airmic/Alarm/IRM (2010), part 2
- COSO (2004) *Enterprise Risk Management: Integrated Framework, Executive Summary*

Unit 4 Risk assessment part 1: introduction and identification



Unit learning outcome

After studying this unit, you should be able to:

- Examine the main approaches to risk identification and assessment

Unit contents

Section learning outcomes

4.1 Risk assessment considerations...49

Describe the critical importance of risk assessment, and the importance of risk identification, outlining the range of techniques that are available and the advantages and disadvantages of each one.

4.2 Value at risk, stress tests and scenarios

Describe the main components of some of the key risk quantification approaches used in the financial services environment for risk measurement, appetite, reporting, regulatory capital and other uses.

Explain VaR, its uses, limitations and key approaches.

Introduce Expected Shortfall.

Explain key approaches to stress testing, their requirements and their limitations.

Understand how VaR and stress tests link to the risk management framework and use

4.3 Risk causes (sources) and consequences...56

Explain the life cycle of risk, including causes, the risk event itself and the consequences, along with some of the tools for identifying and managing causes and consequences

4.4 Risk classification systems ...60

Describe the key features of the best established risk classification systems

Core reading:

- Apostolik and Donahue (2015), pages 201–5, 219–227, 101–105, 116–128, 198–201 and 288–303
- Hopkin (2017), chapters 10 and 11
- *PRA Rulebook* section on risk management

Unit 5 Risk assessment part 2: risk analysis and evaluation



Unit learning outcome

After studying this unit, you should be able to:

- Understand and compare the main approaches to the analysis and evaluation of risk including prescribed approaches and own approaches
- Understand common quantification approaches and how they link to some key requirements within the risk management framework and risk appetite

Unit contents	Section learning outcomes
5.1 Introduction to risk analysis	Describe the concept and purpose of risk analysis within the risk management process within the ERM framework.
5.2 Risk likelihood and impact	Consider the range of quantification approaches available, considering the two dimensions of likelihood and impact, using a quantitative and qualitative approach to analysing risks.
5.3 Regulatory models and Internal models as risk analysis tools	Describe the regulatory tools of risk quantification (standard approaches). Outline the key elements of an internal model. Explain the importance of internal models and their uses within the Financial Services environment (as well as the criteria for regulatory approval). Discuss use of models where not approved (and not required to be approved).
5.4 Defining the upside of risk	Outline the alternative approaches to defining the upside of risk and the application of these approaches to strategy, projects and operations
5.5 Risk evaluation and risk appetite	Explain the importance of risk appetite and consider how it links to the risk quantification and assessments discussed. Examine links to risk control (discussed in Unit 6.)

Core reading:

- Apostolik and Donohue pages 167–171, 213–5, 237–244 and 305–6
- Hopkin (2017), chapters 12, 13, 14 and 25
- *PRA Rulebook* sections on capital requirements and internal models
- *The Orange Book* (HM Treasury, 2004), chapters 4 and 5

Unit 6 Risk response and risk treatment



Unit learning outcome

After studying this unit, you should be able to:

- Distinguish the main features of risk control techniques

Unit contents	Section learning outcomes
6.1 Introduction to risk treatment and risk response	Explain the meanings and purposes of risk response
6.2 The 4Ts	Describe the risk response options in terms of tolerate, treat, transfer and terminate
6.3 Risk control techniques (PCDD)	Describe the types of controls that are available, in terms of preventive, corrective, directive and detective (PCDD) controls
6.4 Control of financial risks	Explain the type and nature of controls and management tools around key financial risks (insurance, market, credit and liquidity).
6.5 Introduction to control of operational risk	Introduce the nature of management tools and controls around operational risks within a financial institution. Set up sections 6.7 to 6.9 in terms of framing regulatory expectation that shall be discussed in the relevant units.
6.6 Insurance and risk transfer	Describe the importance of insurance and the circumstances in which insurance is purchased and the impact it might have on operational risk capital requirements.
6.7 Business continuity planning	Describe the importance of business continuity planning in a financial services environment and explain how it is implemented.
6.8 Outsourcing	Describe the importance of outsourcing in a financial services environment and explain how risks are managed. Understand regulatory expectations around this risk.
6.9 Cyber	Describe the importance of cyber risk in a financial services environment and explain how it

	<p>is minimised.</p> <p>Understand regulatory expectations around this risk.</p> <p>Understand link to Section 6.6 and the fact that it is insurable and that presents an aggregation challenge for insurance companies who provide cover and who also face it as an operational risk themselves.</p>
6.10 Learning from experience	<p>Apply the activity of monitoring and reviewing the risk management processes, learning from controls and loss events.</p> <p>Understand regulatory expectations around “learning from experience” and look at operational risk loss data in detail. Understand role of ORIC and ORX.</p>
<p>Core reading:</p> <ul style="list-style-type: none"> • Apostolik and Donohue pages 128–167 (credit risk), 198–210 (market risk) 230–237 (operational risk) and 288–302 (insurance risk) • Hopkin (2017), chapters 15, 16, 17, 18 and 23 • <i>PRA Rulebook</i> sections on risk control and outsourcing • McDonnell, W (2012) <i>Managing Risk: Practical lessons from recent ‘failures’ of EU insurers</i>, FSA (www.fsa.gov.uk/pubs/occpapers/op20.pdf) • <i>Principles for Sound Liquidity Risk Management and Supervision</i> (BIS, 2008). • <i>The Orange Book</i> (HM Treasury, 2004), chapters 6, 7 and 8, and appendix A 	

Overview of Module 2: Practice of Risk Management in Financial Services

Module aims

The aim of this module is to explore the impact of the business environment on risk management in the banking and insurance sectors. The module examines issues relevant to banks and insurers, as well as the needs and demands of various stakeholder groups, including regulatory authorities. This leads to the study of corporate governance and risk assurance; how this might influence the architecture of a risk management programme and the significance of risk culture, appetite and tolerance of risk in relation to current practices in risk management. It examines the lessons learnt through a number of case studies including the 2008 Financial Crisis.

Module learning outcomes

By the end of the module you should be able to:

- Discuss the impact of the wider business environment on organisations and the issues this raises for risk management in the Financial Services Sector
- Discuss the key features of a risk management framework and their application across risk categories
- Explain the links between risk management approaches and regulation.
- Explain the significance of issues of culture, appetite and tolerance in relation to the management of risk.
- Explain the key features of corporate governance models and explain the link to regulatory expectations.
- Explain the Three Lines of Defence governance model
- Discuss the nature and purpose of internal control, audit and risk assurance techniques.
- Analyse real life case studies and identify key risk management lessons including the Financial Crisis 2008.

Unit 1 The global business environment



Unit learning outcome

After studying this unit, you should be able to:

- Discuss the impact of the wider business environment on organisations and the issues this raises for risk management in the Financial Services sector and in geographical regions
- Understand the emerging regulatory trends that impact on banks and insurers

Unit contents

Section learning outcomes

1.1 The business environment and risk environment...

Discuss the impact of the wider business environment on organisations and the issues this raises for risk management in the Financial Services Sector

1.2 Organisational vision and values

Explain how organisational vision and values contribute to the risk management approach selected (i.e. links of risk strategy and business strategy).

1.3 Risk management, business success and value added

Appraise risk management's contribution to business success and value added

Understand how within Financial Services context, risk management can play a key part in satisfying external stakeholders key to business success (e.g. rating agencies and regulators).

1.4 Sector-specific and geographical issues

Analyse how sector-specific (banking, non-life insurance and life insurance) issues influence risk issues, including emerging regulations, investment and economic performance trends, emerging economies, climate change, etc.

Core reading:

- Apostolik and Donohue (2015), Preface, Chapters 1, 3 and 9
- World Economic Forum (2016) *Global Risks 2016 11th Edition*
- Price Waterhouse Coopers (2015) *Insurance banana skins*
- Price Waterhouse Coopers (2015) *Banking banana skins*

Unit 2 Risk strategy and framework



Unit learning outcome

After studying this unit, you should be able to:

- Illustrate the key features of a risk management framework
- Explain the Three Lines of Defence governance model

Unit contents

Section learning outcomes

2.1 Risk management framework

Explain how the component parts of the risk management framework fit together including risk strategy (linking to Unit 1.2), appetite, governance, reporting, assessment, etc.

Understand the link to related regulatory expectations and how these can drive standards.

Understand the links between the detailed framework components and the concepts of ERM described in Module 1 as well as understanding how the identification, analysis and control approaches described in module 1 fit into the wider ERM framework.

2.2 Risk management responsibilities and documentation

Explain the value of comprehensive and effective risk documentation and the assignment of risk management responsibilities

Explain the Three Lines of Defence governance model and explain how this links to regulation.

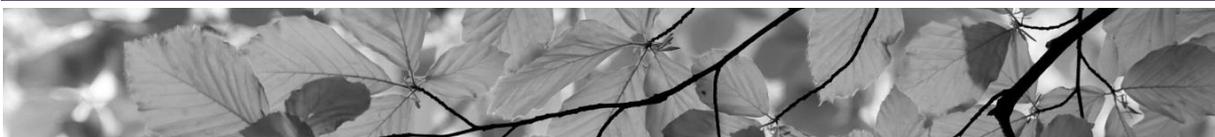
2.3 Risk maturity

Understand ways of assessing the maturity of risk management in an organisation and understand external perspectives (e.g. rating agencies, NAIC, etc.).

Core reading:

- Apostolik and Donohue (2015), Chapter 2 (pages 61–7) and Section 7.4.2
- Hopkin (2017), chapters 21 and 22 (you may like to check back to chapters 6 and 8 as well)
- Bank for International Settlements (2015) *Corporate governance principles for banks*
- EIOPA (2015) *Guidelines on systems of governance and risk management*

Unit 3 Risk culture, conduct, appetite and tolerance



Unit learning outcome

After studying this unit, you should be able to:

- Explain the significance of issues of culture, appetite and tolerance in relation to the management of risk
- Understand and describe Conduct Risk

Unit contents

Section learning outcomes

3.1 Organisational behaviour and culture

Analyse organisational behaviour and culture

3.2 Risk appetite and tolerance

Analyse risk appetite and tolerance. Describe different approaches to risk appetite and link to risk quantification approaches described elsewhere in Module 1.

Describe the link between risk strategy and risk appetite.

3.3 Risk training and communication

Assess the role of risk training and communication, including risk language

3.4 Risk practitioner competencies

Discuss required risk practitioner competencies including regulatory prescribed competencies for key functions and Fit and Proper requirements

3.5 Conduct

Understand the importance of conduct risk and its links to organisational behaviour and the related regulations

Core reading:

- Apostolik and Donohue (2015), sections 2.4.4 and 9.2.2
- Hopkin (2017), chapters 24–27
- *IRM Risk Appetite and Tolerance Report: Executive Summary* (IRM, 2011)
- *PRA Rulebook* sections on risk management and conduct rules
- The Bank of England's *The use of PRA powers to address serious failings in the culture of firms*
- The executive summary of the *RIMS risk manager core competency model*

Unit 4 Risk and organisations



Unit learning outcome

After studying this unit, you should be able to:

- Explain the key features of corporate governance models and the role of the risk management function
- Discuss the various stakeholder influencing the design of corporate governance arrangements

Unit contents

4.1 Introduction to corporate governance and risk governance

4.2 Identifying stakeholders, including regulatory bodies

Section learning outcomes

Assess the key features of corporate governance models

Explain the relevance of understanding stakeholders' roles in risk management and their expectations for risk governance

Core reading:

- Apostolik and Donohue (2015), Section 2.4 of Chapter 2, Sections 3.3.6 and 3.3.9 of Chapter 3, Sections 8.1, 8.2, 8.3 and 8.7 of Chapter 8 and Section 9.6 of Chapter 9
- Hopkin (2017), chapters 28 and 29
- Bank for International Settlements (2015) *Corporate governance principles for banks*.
- EIOPA (2015) *Guidelines on systems of governance and risk management*
- Financial Reporting Council (2016) *UK Corporate Governance Code*

Unit 5 Risk assurance and reporting



Unit learning outcome

After studying this unit, you should be able to:

- Discuss the nature and purpose of internal control, audit and risk assurance techniques
- Discuss the nature and purpose of an organisation's own view of risk
- Explain the nature and purpose of external risk disclosures

Unit contents	Section learning outcomes
5.1 The control environment	Explain the importance of the control environment in regard to risk management
5.2 Risk assurance and internal audit	Explain the key elements of risk assurance techniques Analyse the role and value of the internal audit function and risk assurance
5.3 Own assessment of risk	Explain the nature and purpose of the ORSA (referencing global and local standards) and ICAAP
5.4 Risk reporting	Analyse the benefits of effective risk reporting (including Sarbanes-Oxley) Explain the nature of public disclosure and risk reporting and how it sits within the regulatory framework
5.5 Corporate reputation	Explain how risk influences corporate reputation Explain links to Pillar 3 public disclosure addressed in 5.6 Explain links to rating agency views and potential for rating impact from reputational events and/or idiosyncratic events. Also link to reverse stress tests (see Module 1 Unit 5.3) where driven by reputational impact

Core reading:

- Apostolik and Donohue (2015), Sections 5.5 and 8.4, 8.5 and 8.6
- Hopkin (2017), chapters 20 and 33–36
- *PRA Rulebook* sections on Internal controls, ICAAP and ORSA
- Bank for International Settlements (2015) *Corporate governance principles for banks*.
- EIOPA (2015) *Guidelines on systems of governance and risk management*
- Financial Reporting Council (2014a), *Guidance on Risk Management, Internal Control and Related Financial and Business Reporting*, chapters 31–5
- IIA (2013a) *The Three Lines of Defence in Effective Risk Management and Control*

Unit 6 Case studies in organisational risk management



Unit learning outcome

After studying this unit, you should be able to:

- Analyse real-life case studies and identify key risk management lessons
- Understand and discuss emerging risk themes

Unit contents

6.1 Case studies in organisational risk management

6.2 Emerging risks and future developments

Section learning outcomes

Discuss the lessons that can be learned from examining case studies in risk management including the 2007/2008 Financial Crisis and other case studies (Barings etc.)

Give examples of risks that have emerged in recent years including cyber, terrorism, pandemic, etc. Link to wider industry trends around consolidation, technology and distribution.

Core reading:

- Apostolik and Donohue (2015), several case studies
- Hopkin (2017), chapter 9



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